

REMARKS

The Applicant would like to thank the Examiner for discussing the above-mentioned Final Office Action dated February 13, 2007, and further explaining his position regarding independent claims 1, 22 and 23, via a telephone conversation on May 2, 2007.

During the telephone conversation the Examiner: (1) indicated that changing “operable to” to “configured to” would overcome the rejection under 35 U.S.C. §112, second paragraph; and (2) indicated that if independent claims 1, 22 and 23 were amended in accordance with the Examiner’s statement on page 19 of the above-mentioned Final Office Action, the above-identified independent claims would likely overcome the Examiner’s rejection based on Moller et al. (U.S. 6,826,522 B1).

Thus, based on the above-mentioned conversation with the Examiner, (1) claims 1-5, 7 and 10-21 have been amended to recite “configured to” rather than “operable to,” and (2) independent claims 1, 22 and 23 have been amended in accordance with the Examiner’s suggestion (see page 19 of Final Office Action) to recite simulation “in a same stage in pipeline processing.” In view of the above amendments, the above-mentioned telephone conversation, and the following remarks, reconsideration of the rejections and further examination are respectfully requested.

In item 4 on page 2 of the Office Action, claims 1-21 were rejected under 35 U.S.C. §112, second paragraph, “as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.” Specifically, claims 1-21 were rejected for use of the words, “operable to.” In view of the telephone conversation with the Examiner on May, 2, 2007, it is respectfully requested that the Examiner withdraw the above-mentioned rejection since claims 1-5, 7 and 10-21 have been amended to recite “configured to” rather than “operable to.”

In item 6 on page 3 of the Office Action, claims 1, 2, 5, 6, 8, 9, 22 and 23 were rejected under 35 U.S.C. §102(e) as being anticipated by the Moller patent. This rejection is believed clearly inapplicable to claims 1-23 for the following reasons.

On page 19 (first full paragraph) of the above-mentioned Final Office Action the Examiner stated “[t]he Examiner takes the position that though the specification indicates simultaneous execution of a group of instructions at the same stage of the pipeline execution, the claims do not state that the simultaneous execution implies that all or some of the instructions are required to be

at the same stage of the pipeline.”

In view of the Examiner’s comment on page 19 of the Final Office Action and the above-mentioned telephone conversation with the Examiner, independent apparatus claim 1 has been amended to recite, “a first simulation unit configured to simulate, in a same stage in pipeline processing, execution of a group of instructions intended to be simultaneously executed, and to generate a first simulation result.” Moreover, in view of the Examiner’s comments, independent method claims 22 and 23 have been amended to recite, “performing a first simulation comprising simulating, in a same stage in pipeline processing, execution of a group of instructions comprising a plurality of instructions intended to be simultaneously executed.”

In addition, please note that as previously indicated in the 2nd paragraph on page 10 of the Response filed on December 15, 2006 (i.e., “The first simulation unit simulates a simultaneous execution of the instructions intended to be simultaneously executed. The second simulation unit simulates a sequential execution of the same group of instructions based on the result of the simultaneous execution of those instructions.”), the result of the simultaneous execution of instructions by the first simulation unit is shared with the second simulation unit to be used for sequential simulation of the same instructions. Accordingly, it is respectfully submitted that, although the Moller reference discloses simultaneous simulation and sequential emulation of operations which will ultimately be done in parallel on the proposed processor (see col. 1, lines 31-33), Moller does not disclose or suggest the above mentioned sharing (i.e., (1) simultaneous simulation of instructions and generation of results, (2) sharing the results of the simultaneous simulation, and (3) sequential simulation of the same instructions based on the shared results).

In view of the above amendments, the above remarks, the Examiner’s comments, and the conversation with the Examiner on May 2, 2007, it is respectfully submitted that the above-mentioned 35 U.S.C. §102(e) rejection is clearly inapplicable since the Moller reference does not anticipate the invention as recited in independent claims 1, 22, and 23 or the claims that depend therefrom. Furthermore, Moller does not suggest the above-discussed limitations of claims 1-23.

In items 9-11 on pages 6-17 of the Office Action, the Examiner cited the Matsumoto, Ussery and Miyake references for teaching various features of dependent claims 3, 4, 7 and 10-21 which were not disclosed or suggested by the Moller reference. However, the Matsumoto, Ussery,


and Miyake references clearly provide no teaching or suggestion that would have obviated the above-discussed shortcomings of the Moller patent.

For these reasons, it is believed clear that a person of ordinary skill in the art would not have found it obvious to modify the Moller patent or to make any combination of the references of record in such a manner as to result in or otherwise render obvious the invention as recited in claims 1-23. Therefore, it is respectfully submitted that claims 1-23 are clearly allowable over the prior art of record

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance and an early notification thereof is earnestly requested. The Examiner is invited to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,

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May 10, 2007